

**Notice of Allowability**

Application No.

09/456,288

Examiner

Brandon S. Hoffman

Applicant(s)

DAVIS, STEVEN BENJAMIN

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to after final comments on January 3, 2006.
2. ☒ The allowed claim(s) is/are 1, 3, 4, 6, 7, 9-35 and 37-58.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

CEL  
Primary Examiner  
AVZ431  
2/3/06

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1, 3, 4, 6, 7, 9-35, and 37-58 are allowed.
2. The following is an examiner's statement of reasons for allowance: the current claims overcome any prior art of record. This is mainly because the one-time true random number (as defined in the specification at page 3, lines 19-20, it is one-time true random data because the consumer selects a **new set** of random data for **each** transaction) generated by the consumer does not contain a corresponding algorithm, that is known by the receiver/verifier, that can descramble the random data produced by the consumer. In all prior art systems, the consumer and verifier both know the algorithm used in order to verify if the random data is correct. The current system does not descramble the scrambled data, but instead simply "looks" at the data to determine if the correct data is in there.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Bauer (U.S. Reg. No. 31,588) on January 19, 2006.

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1. (Currently Amended) A method for a provider to verify a client's secret identifier, comprising the steps of:

the client scrambles his/her predetermined secret identifier in a one-time, true random way with random data, to produce scrambled data comprising randomly interleaved (i) said secret identifier and (ii) said one-time, true random data;

the scrambled data is transmitted to the provider; and

the provider determines whether the client's secret identifier is present in the received scrambled data, wherein the provider rejects a transaction if the random data in the received scrambled data is substantially the same as random data received in a previous transaction corresponding to said client.

2. (Cancelled)

3. (Previously Presented) A method for a provider to verify a client's secret identifier received in scrambled data which includes the secret identifier randomly interleaved with one-time, true random data, comprising the steps of:

determining whether the client's secret identifier is present in the received scrambled data, which includes the secret identifier randomly interleaved with the one-time, true random data;

comparing the one-time, true random data in the received scrambled data with previously received random data corresponding to said client; and

authorizing a transaction if the one-time, true random data in the received scrambled data is substantially different from said previously received random data.

4. (Currently Amended) Apparatus for a provider to verify a client's secret identifier, comprising:

means for the client to scramble his/her predetermined secret identifier in a one-time, true random way with one-time, true random data, the scrambled data consisting of randomly interleaved (i) random data and (ii) the secret identifier;

a transmitter which transmits the scrambled data to the provider; and

a provider processor which is used to determine whether the client's secret identifier is present in the received scrambled data, wherein the provider processor rejects a transaction if the random data in the received scrambled data is substantially the same as random data received in a previous transaction corresponding to said client.

5. (Cancelled)

6. (Currently Amended) A process for a consumer to submit secure verification information, comprising the steps of:

obtaining a secret identifier from a provider, said secret identifier being unique to said consumer;

randomly interleaving, in a one-time truly random way, the consumer's secret identifier with a plurality of randomly selected alphanumeric characters; and

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submitting the combined randomly interleaved secret identifier and plurality of randomly selected alphanumeric characters to the provider over a computer network.

7. (Previously Presented) A process according to Claim 6, wherein said submitting step is performed on the Internet.

8. (Cancelled)

9. (Previously Presented) A process according to Claim 6, wherein said randomly interleaving step and said submitting step are performed on a building security system.

10. (Previously Presented) A process according to Claim 6, wherein said submitting step is performed over a telephone system.

11. (Previously Presented) A process according to Claim 6, wherein said randomly interleaving step and said submitting step are performed in a credit or debit card verification system.

12. (Previously Presented) A process according to Claim 6, wherein said randomly interleaving step and said submitting step are performed in an ATM system.

13. (Previously Presented) A process according to Claim 6, wherein said randomly interleaving step and said submitting step are performed in an phone card system.

14. (Previously Presented) A process according to Claim 6, wherein the consumer manually performs said randomly interleaving step.

15. (Previously Presented) A process according to Claim 6, further comprising the step of the provider rejecting the submitted randomly interleaved identifier if the randomly interleaved identifier is substantially identical to a randomly interleaved identifier previously submitted to the provider.

16. (Previously Presented) A process according to Claim 6, wherein the randomly interleaving step includes the step of changing an order of alphanumeric characters in the secret identifier.

17. (Previously Presented) A method of transacting a charge card purchase, comprising the steps of:  
providing a user with a transaction form;  
receiving from the user a credit card number and a super identifier, the super identifier comprising (i) a secret identifier unique to the user and (ii) a plurality of

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randomly chosen alphanumeric characters, selected in a one-time true random way, the super identifier comprising the randomly chosen alphanumeric characters randomly interleaved, in a one-time true random way, with the secret identifier;

comparing the received super identifier with a plurality of previously received super identifiers; and

accepting the credit card transaction if the received super identifier is not substantially identical to previously received super identifiers.

18. (Previously Presented) A method according to Claim 17, wherein the charge card purchase comprises a credit card purchase.

19. (Previously Presented) A method according to Claim 17, wherein the charge card purchase comprises a debit card purchase.

20. (Previously Presented) A method according to Claim 17, wherein the charge card purchase comprises a phone card purchase.

21. (Previously Presented) A method according to Claim 17, wherein the charge card purchase comprises a lottery ticket purchase.

22. (Previously Presented) A method according to Claim 17, wherein the secret identifier comprises a PIN.

23. (Previously Presented) A method according to Claim 17, wherein the randomly chosen alphanumeric characters are chosen by the user.

24. (Previously Presented) A method according to Claim 17, wherein the number of randomly chosen alphanumeric characters are the same as the number of characters in the secret identifier.

25. (Previously Presented) A method according to Claim 17, wherein the method is performed at a point of sale.

26. (Previously Presented) A method according to Claim 17, wherein the method is performed at a provider server.

27. (Previously Presented) A method according to Claim 17, wherein the method is performed over the Internet.

28. (Previously Presented) A method according to Claim 17, wherein the secret identifier is scrambled by the user using the plurality of alphanumeric characters.

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29. (Previously Presented) A method of carrying out a secure financial transaction, comprising the steps of:

receiving from a user (i) a request for a transaction and (ii) a super PIN which comprises a PIN randomly interleaved, in a one-time true random way, with a plurality of alphanumeric characters randomly chosen, in a one-time true random way, by a user; and

accepting the request if the received super PIN is substantially different from a previously received super PIN.

30. (Previously Presented) A method according to Claim 29, wherein the acceptance criteria is dependent on the Super PIN including all of the alphanumeric characters that comprise the user's secret identifier.

31. (Previously Presented) A method according to Claim 29, wherein the acceptance criteria is dependent on the Super PIN not including substantially all of the plurality of randomly selected alphanumeric characters from a previous transaction.

32. (Previously Presented) A method according to Claim 29, where the previously used plurality of randomly selected alphanumeric characters are stored.

33. (Previously Presented) A method according to Claim 29, where a the rejection of the Super PIN validation triggers a supplementary validation activity.

34. (Currently Amended) Apparatus for a consumer to submit secure verification information including a secret identifier obtained from a provider, said a secret identifier being unique to said consumer, said apparatus comprising:

means for randomly interleaving, in a one-time true random way, the consumer's secret identifier with a plurality of alphanumeric characters; and

means for submitting the randomly interleaved identifier to the provider,  
said means for submitting being coupled to a computer network.

35. (Previously Presented) Apparatus according to Claim 34, wherein said means for submitting are coupled to the Internet.

36. (Cancelled)

37. (Previously Presented) Apparatus according to Claim 34, wherein said means for submitting are coupled to a building security system.

38. (Previously Presented) Apparatus according to Claim 34, wherein said means for submitting are coupled to a telephone system.

39. (Previously Presented) Apparatus according to Claim 34, wherein said means for submitting are coupled to a credit card verification system.

40. (Previously Presented) Apparatus according to Claim 34, wherein said means for submitting are coupled to an ATM system.

41. (Previously Presented) Apparatus according to Claim 34, wherein the consumer uses a writing instrument to manually perform the random interleaving.

42. (Previously Presented) Apparatus according to Claim 34, wherein an automated process or device performs the random interleaving.

43. (Previously Presented) Apparatus according to Claim 34, wherein an automated process or device creates the Super PIN on behalf of the user.

44. (Previously Presented) Apparatus according to Claim 34, further comprising a provider server for rejecting the submitted randomly interleaved identifier if the randomly interleaved identifier is substantially identical to a randomly interleaved identifier previously submitted to the provider.

45. (Previously Presented) Apparatus according to Claim 34, wherein the means for randomly interleaving includes means for changing an order of alphanumeric characters in the secret identifier.

46. (Currently Amended) Apparatus for transacting a charge card transaction, comprising:

means for receiving from the user a credit card number and a super identifier, the super identifier comprising (i) a secret identifier unique to the user and (ii) a plurality of randomly chosen alphanumeric characters, said super identifier comprising the plurality of randomly chosen alphanumeric characters randomly interleaved, in a one-time true random way, with said secret identifier, wherein said means for receiving is coupled to a computer network;

means for comparing the received super identifier with a plurality of previously received super identifiers; and

means for accepting the credit card transaction if the received super identifier is not substantially identical to previously received super identifiers.

47. (Previously Presented) Apparatus according to Claim 46, wherein the secret identifier comprises a PIN.

48. (Previously Presented) Apparatus according to Claim 46, wherein the randomly chosen alphanumeric characters are chosen by the user in a one-time true random way.

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49. (Previously Presented) Apparatus according to Claim 46, wherein the number of randomly chosen alphanumeric characters are the same as the number of characters in the secret identifier.

50. (Previously Presented) Apparatus according to Claim 46, wherein said means for receiving are disposed at a point of sale.

51. (Previously Presented) Apparatus according to Claim 46, wherein said means for receiving are disposed at a provider server.

52. (Previously Presented) Apparatus according to Claim 46, wherein said means for receiving are coupled to the Internet.

53. (Previously Presented) Apparatus according to Claim 46, wherein the secret identifier is interleaved by the user using the plurality of alphanumeric characters.

54. (Currently Amended) Apparatus for carrying out a secure financial transaction, comprising:

means for receiving from a user (i) a request for a transaction and (ii) a super PIN which comprises a PIN randomly interleaved, in a one-time true random way, with a plurality of alphanumeric characters randomly chosen by a user; and

means for accepting the request if the received super PIN is substantially dissimilar to a previously received super PIN, wherein the means fore accepting rejects a transaction if the random data in the received data is substantially the same as random data received in a previous transaction corresponding to said user.

55. (Previously Presented) A method according to Claim 1, wherein at least one of the secret identifier and the random data comprises a sequence of alphanumeric symbols.

56. (Previously Presented) Apparatus according to Claim 4, wherein at least one of the secret identifier and the random data comprises a sequence of alphanumeric symbols.

57. (Previously Presented) A method according to Claim 28, wherein at least one of the secret identifier and the random data comprises a sequence of alphanumeric symbols.

58. (Previously Presented) Apparatus according to Claim 54, wherein at least one of the secret identifier and the random data comprises a sequence of alphanumeric symbols.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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